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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,126	10/06/2006	**Claude Lamblin**	P1920US	1683

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EXAMINER	
OPSASNICK, MICHAEL N	

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
01/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,126	LAMBLIN ET AL.	
	Examiner	Art Unit	
	MICHAEL N. OPSASNICK	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "where appropriate" in claims 1,22,23 is a relative term which renders the claim indefinite. The term "where appropriate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Dependent claims 2-21 do no remedy the indefiniteness of this language and as such, are also rejected under 35 U.S.C. 112. For art related examination purposes, examiner will disregard the term "where appropriate".

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-23 are directed to calculation of pulse positions of a signal which does not fall into one of the enumerated four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter).

Claims 1-23 are not directed toward:

1) a process (nothing is processed/transformed, - the claims are toward calculation of pulse positions between codecs); a statutory "process" under 35 USC 101 must (a) be tied to another statutory category (such as a manufacture or a machine), or (b) transform underlying subject matter (such as an article or material) to a different state or thing. Claims 1-23 neither transform underlying subject matter nor positively recite structure associated with another statutory category, and therefore do not define a statutory process.);

2) a machine - there are no claim elements towards an appropriate apparatus, e.g. the elements of a device that would perform the claim steps.

3) a manufacture (no claim elements pertain to an output product nor a

4) a composition of matter (claims are toward pulse position calculation and not a composition of matter).

Furthermore, the claims are directed to a method which as claimed, is a mathematical calculation where the claims do not produce a useful, tangible, and concrete result. If the acts of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter (Benson, 409 U.S. at 71-72, 175, USPQ at 676). Furthermore, claims define nonstatutory processes if they simply manipulate abstract ideas (Warmerdam, 33 F.3d at 1360,31 USPQ2d at 1759). As for guidance to areas of statutory subject matter, see 35 U.S.C. 101 Interim Guidelines (with emphasis of the Clarification of Interim Guidelines For Examination of Patent Applications for Subject Matter Eligibility); as an example, in Alappat, the claimed output smooth waveform (consisted of lighting pixels on an oscilloscope/display) is a useful, concrete, tangible, final result; in Arrhythmia, the claimed useful, concrete, tangible, final result represented the condition of a patient's heart; in State Street, the claimed useful, concrete, tangible, final result was data output that represented a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.

Claims 22,23 are also non-statutory under the most recent interpretation of the Interim Guidelines regarding 35 U.S.C.101 because although this claim is toward a computer readable medium, as claimed, does not define any structural and functional interrelationship between the

computer program and other claimed elements of a computer which permit the computer program's functionality to be realized (Warmerdam, 33 F.3d at 1361,31 USPQ2d at 1760; Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035). Examiner notes that as per claims 22,23, elements such as "system" and "memory" and "processor" are necessary structures, the interrelationships between the computer readable medium, the device, and the software code/instructions are not positively claimed (the necessary steps of executing the stored instructions, or causing a processor to retrieve a "software product" which causes the processor to change it's natural state to perform method steps; are not present in the current claim scope). Correction is required.

Allowable Subject Matter

6. Claims 1-23 are allowable over the prior art of record, and would be allowed when amended to overcome the 35 U.S.C 112 and 101 rejections, as noted above.

7. The following is a statement of reasons for the indication of allowable subject matter: As per the independent claims, the claim elements pertaining to the interconnectivity of choosing pulse positions based upon double codec requirements is not explicitly taught by the prior art of record.

Performing pulse selecting is well known in the art. For example, Wang et al (7177804) teaches pulse searching - col. 14 line 1-55, in a multiple codec environment - Fig. 2. Hiekkkinen et al (2005/0137858) teaches generating LP residuals on a frame by frame bases and

then locating pitch pulses based upon energy contours (page 5, para 0065 - 0068). Stachurski et al (7222070) teaches LP residuals with extraction of pitch information (col. 8 lines 45-65). Ferhaoui et al (US2001/0044717) teaches a CS-ACELP type codebook with pulse positions for searching (page 2, pp 0024-0026). Jabri (US2003/0177004) teaches LPC's with adaptive and fixed codes - page 4, pp 0076-0077. Kim et al (6687668) teaches recovering residuals and performing energy calculations (col. 5 line 44-65, into col. 6). However, none of the prior art of record explicitly teaches the claim limitations of the independent claims as noted above. Furthermore, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of the prior art of record to obtain the recited claim limitations of the independent claims as noted above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael N. Opsasnick/
Primary Examiner, Art Unit 2626
12/7/08